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REMARKS/ARGUMENTS

This amendment is in response to the Final Office Action mailed on October 17, 2003 wherein Claims 1-12 and 14-17 were rejected. Claims 1 and 5 have been amended, Claim 18 has been added, and Claims 1-12 and 14-18 remain pending.

Claim Rejections Under 35 USC § 103

On page 2 of the Office Action, the Examiner rejected Claims 1-4 under 35 USC §103 as being unpatentable over Kajiwara et al. in view of Ehrhart et al. On page 3 of the Office Action, the Examiner rejected Claim 5 under 35 USC §103 as being unpatentable over Kajiwara et al. in view of Ehrhart et al and Yamamoto. On page 4 of the Office Action, the Examiner rejected Claim 6 under 35 USC §103 as being unpatentable over Kajiwara et al. in view of Ehrhart et al and Darby et al. On page 5 of the Office Action, the Examiner rejected Claims 7 and 8 under 35 USC §103 as being unpatentable over Kajiwara et al. in view of Ehrhart et al and Grennan et al. On page 6 of the Office Action, the Examiner rejected Claims 9-12 under 35 USC §103 as being unpatentable over Yamamoto and Kajiwara et al. On page 7 of the Office Action, the Examiner rejected Claims 15 and 16 under 35 USC §103 as being unpatentable over Yamamoto, Kajiwara et al and Grennan et al. On page 8 of the Office Action, the Examiner rejected Claims 14 and 17 under 35 USC §103 as being unpatentable over Yamamoto, Kajiwara et al and Darby et al.

The Examiner on page 2 of the Final Office Action stated that Kajiwara fails to show a liquid coolant medium. Applicants agree with this statement. The Examiner further stated that Ehrhart discloses a set of passageways through the stator using a liquid coolant medium and that it would have been obvious to modify Kajiwara as taught by Ehrhart to use a cooling medium. Applicants respectfully disagree with the Examiner.

Kajiwara uses a fan rotor 9 to blow air through the interior of the rotor as disclosed in column 5, lines 56-64 and seen in Figure 1A. Kajiwara is completely silent with respect to using centrifugal force to move a liquid coolant through passage way in an electric motor rotor. Kajiwara uses a fanning or beating function of the fan rotor 9 to move air. Ehrhart is also completely silent with respect to using centrifugal force to move a liquid coolant through passageway in an electric motor rotor. Ehrhart discloses only the cooling of a wound stator coil to cool the motor, as disclosed in column 4, lines 9-34. The cooling of a stator coil is

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fundamentally different than the cooling of a motor rotor, as the stator coil is static and the rotor of an electric motor is moving. It is relatively simple to plumb liquid coolant to a fixed stator but not to a moving rotor and there is no suggestion in the art cited by the Examiner to use centrifugal force to move a liquid coolant through a rotor. Accordingly, the combination suggested by the Examiner does not teach or suggest the present invention, and there would be no motivation to combine Kajiwara and Ehrhart. Obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching suggestion or incentive supporting the combination. *ACS Hospital Systems, Inc. v. Monteffiore Hospital*, 732 F.2d 1572, 1577.

Kajiwara in fact teaches away from using centrifugal force to move liquid coolant, as it discloses the use of a fan to move cooling air through a motor. The suggested combination of the Examiner is improper, references cannot be combined where the reference teaches away from their combination. See MPEP Section 2145. The combination suggested by the Examiner further destroys the intent, purpose, and/or function of the invention disclosed in Kajiwara. The intent, purpose, and function of Singh are focused on moving air through a motor using a fan. To place a liquid coolant or oil into the device of Kajiwara would destroy the movement of air (propelled by the fan) through the electric motor of Kajiwara. The CCPA and Federal Circuit have consistently held that an obviousness rejection based on a modification that destroys, the intent, purpose or function of the invention disclosed in a reference is not proper and a prima facie case of obviousness cannot be properly made. *In re Gordon* 733 F.2d 900, 221.

With reference to Claims 9 and 17, Yamamoto is silent with respect to passageways through a rotor to conduct liquid coolant and, as previously discussed, Kajiwara teaches a fan to move air through an electric motor. The combination of Yamamoto and Kajiwara is improper and does not teach or suggest the present invention.

The Examiner has failed to explain how and why the claimed subject matter is rendered unpatentable over the prior art and point out where each of the specific limitations recited in the rejected claims is found in the prior art relied on. If the Examiner relies on personal knowledge that the apparatus of the present invention is obvious, Applicants respectfully request support for this assertion in the form of an affidavit that shall be subject to contradiction or explanation by the affidavits of the Applicants and other persons under 37 CFR 1.104(d)(2).

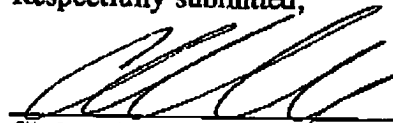
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Conclusion

The entire Final Office Action dated October 17, 2003 has been carefully reviewed, and this response is submitted as being fully responsive thereto. In view of the preceding remarks, Applicants respectfully submit that Claims 1-12 and 14-18 are in condition for allowance and respectfully request such action at the Examiner's earliest convenience. If the Examiner believes that personal contact would be advantageous to the disposition of this case, he is requested to call the undersigned at his earliest convenience.

If for some reason a fee needs to be paid, please charge Deposit Account No. 07-0960 for the fees, which may be due.

Respectfully submitted,



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